

UMO 1528
PATENT

#12

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Van De Mark et al.
Serial No. 09/532,839
Filed March 21, 2000
Confirmation No. 7157
For WATER BORNE FILM-FORMING COMPOSITIONS
Examiner Edward J. Cain

Art Unit 1714

February 17, 2003

DECLARATION OF PRIOR INVENTION UNDER 37 C.F.R. § 1.131

We, Michael R. Van De Mark and Nantana Jiratumnukul, declare as follows:

1. We are inventors of the subject matter claimed in the above-entitled United States patent application, Serial Number 09/532,839. Since January, 1986, Dr. Van De Mark has been an Associate Professor of Chemistry at the University of Missouri, Rolla. Dr. Jiratumnukul was a graduate student of Dr. Van De Mark's at the University of Missouri, Rolla, where she obtained her Ph.D. Since December, 2000, Dr. Jiratumnukul has been a lecturer in the Department of Materials Science at Chulalongkorn University in Bangkok, Thailand.
2. We conceived and reduced to practice the invention claimed in this application in the United States before February, 1999.
3. All work referred to herein was carried out in the United States.
4. Evidence of our conception and reduction to practice of film-forming compositions comprising a methyl ester of soy oil is attached hereto as Exhibit A. On

information and belief, Exhibit A is a true and correct copy of one page of a laboratory notebook (with the date deleted) maintained by Dr. Jiratumnukul who, at the time the work described in these notebook pages was performed, was working under the direction and supervision of Dr. Van De Mark. The work described on this page was carried out prior to February, 1999. Exhibit A identifies and describes the preparation of paint formulations (i.e., film-forming compositions) comprising the methyl ester of soy oil as the coalescent aid and further comprising either FLEXBOND 325 (vinyl acetate latex) or UCAR 379G (vinyl acrylic latex). The other components of these compositions are as follows: water, PG (propylene glycol), X-102 (Triton X-102, a surfactant), Tamol 850 (a dispersant), Wet 260 (a wetting agent), AMP 95 (a pH modifier), RM 825 (Acrysol RM 825, an associative thickener), TP-900 (titanium dioxide), Atomite (calcium carbonate), and Drewplus 493 (Drewplus L-493, a defoamer). As such, Exhibit A evidences our conception and reduction to practice of film-forming compositions comprising the methyl ester of soy oil prior to February, 1999.

5. We were not aware of Rauls, U.S. Patent No. 6,156,833, prior to the filing of this application.

6. We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Michael R. Van De Mark

Date

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Nantana Jiratumnukul
Nantana Jiratumnukul

Feb 19, 03
Date



EXHIBIT A

Paint Formulation with Methyl ester (Methyl soyate) as coalescent aid : To see the b
 based on formulated % resistance to

Gloss flexbond + methyl ester (pH 8.0)

mixing 400 RPM	H ₂ O	15.54
	PG	11.2
	X-102	0.36
	Tamal 850	1.60
	wet 260	0.36
	AMP 95	0.20
	RM 825	3.4

grinding 1200 RPM	TP-900	43.2
	Atomite	14.1

letdown 400 RPM	flexbond 325	112.0
	Methyl soyate	3.6
	dreuplus	0.36
	H ₂ O	10.6

Gloss Ucar 3796 + Methyl ester (pH 9.5)

H ₂ O	16.4
PG	13.6
X-102	0.38
Tamal 850	1.6
wet 260	0.9
AMP 95	0.2
RM 825	3.0

TP-900	42.4
Atomite	14.0

Ucar 3796	110.34
Methyl ester	6.23
dreuplus	0.36
H ₂ O	6.16

Flat flexbond 325 + Methyl soyate (pH 9.4)

H ₂ O	28.52
PG	8.70
X-102	0.44
Tamal 850	3.8
wet 260	1.0
AMP 95	
RM 825	3.2

TP-900	48.6
Atomite	39.2

flexbond 325	87.0
Methyl ester	2.84
dreuplus 493	0.4
H ₂ O	12.0

Flat Ucar 3796 + Methyl soyate (pH 8.8)

H ₂ O	28.60
PG	11.04
X-102	0.44
Tamal 850	3.8
wet 260	1.0
AMP 95	0.2
RM 825	2.32

TP-900	50.0
Atomite	40.0

Ucar 3796	89.0
Methyl ester	5.0
dreuplus 493	0.4
H ₂ O	7.26